COASTAL IMPACT ASSISTANCE PROGRAM
Jefferson Parish Project Nominee Fact Sheet

Project Title: Elmer's Island Beach Restoration

Entity/Individual nominating the project: Jefferson Parish, Louisiana

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Total CIAP Funds Requested: $ 1,500,000

Parish CIAP Funds Proposed: $ 0

State CIAP Funds Requested: $ 1,500,000

Infrastructure Funds Proposed: N/A

Description and Location of the Project: The project is located southerly of Louisiana Highway 1 (LA-1), in the very southwestern tip of Jefferson Parish Louisiana at Cheniere Caminada on the barrier shoreline called Elmer's Island approximately six (6) miles southwest of the town of Grand Isle, Louisiana.

The southwestern portion of Elmer's Island experienced two major breaches during the 2005 hurricane season. This project would promote self healing of the breach through the use of the Coastal Erosion Mitigation Solution® (CEMS®) System developed by Beach Restoration, Inc., which integrates Scientific Analysis, Nature, Engineering and Technology.

The CEMS® uses a detailed process of data gathering, assessment, integration and sensitivity analysis to develop a detailed understanding of site-specific characteristics. Computer modeling and analysis produce a discrete solution that will guide the placement of underwater, low profile, and porous geotubes to achieve sediment equilibrium, allowing the breach to close.

The project proposes to install a series of underwater, low profile, and porous geotubes perpendicular to the Gulf shoreline across the breaches to form a deposition zone thus enhancing the ability to trap sands and promote closure of the breach.

Project Type: Conservation, restoration and protection of coastal area, including wetland

Project Justification: Prior to the 2005 hurricane season, the project area was a contiguous barrier shoreline which provided initial protection to interior marshes, chenier ridges, and LA-1 from the full impacts of wave energy from the Gulf of Mexico. Two main areas were overwashed and breached. The resulting tidal scour has opened cuts in the barrier shoreline allowing Gulf waters to enter interior areas. The breaches will continue to expand and deepen, further increasing the potential for direct Gulf impacts to the interior marshes, chenier ridges, and LA-1. Hydrologic changes have resulted from the breaches with Gulf waters now directly entering the once quiet lagoon type area. Flooding now occurs in the interior marshes and Chenier Caminada when strong pre-frontal southerly winds push water in from the Gulf. The interior marshes and chenier ridges of the area provide storm buffer

protection for critical infrastructure in the vicinity including LA HWY 1, Port Fourchon, and the LOOP pipeline distribution system.

The project is consistent with the following coastal restoration initiatives:

COAST 2050: TOWARD A SUSTAINABLE COASTAL LOUISIANA:

Coastwide Strategy:

Maintain or Restore Ridge Functions.

Regional Strategy:

#22. Restore/maintain barrier headlines, islands, and shorelines.

Previously Proposed Strategies:

Creation and restoration of the barrier shoreline
Management of the brackish-to-saline marsh hydrology

LOUISIANA COASTAL AREA ECOSYSTEM RESTORATION STUDY (LCA):

Initial Near-Term Critical Restoration Features:

3. Barataria Basin Barrier Shoreline Restoration

Strategies:

Barrier island restoration through placement of sand from offshore sources or the Mississippi River to sustain key geomorphic structures.

COASTAL IMPACT ASSISTANCE PROGRAM (CIAP):

Protect Critical infrastructure

Project Cost Share: State = 0 %
Parish = 0 %